

Date: Sat, 22 May 93 19:07:23 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #627  
To: Info-Hams

Info-Hams Digest                      Sat, 22 May 93                      Volume 93 : Issue    627

Today's Topics:

                    2 Meters and Airlines  
                    Alinco DJ580 Gets HOT!!!  
                    Anyone built the CHU receiver?  
                    Balanced feedline (was: G5RV)  
                            CW skeds  
            Daily Solar Geophysical Data Broadcast for 21 May  
                    G5RV Antenna (My opinion)  
            Going about building your first transceiver??  
                    Need Geosync Newsline Radio Program Info  
                            Netherlands  
            Question: Can a novice take the extra test?  
                    Recommendations wanted for SAT QSO's  
                            RFI from ZyXEL modem  
                    Velocity Factor of Hardline Coax

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Sat, 22 May 1993 16:11:04 GMT  
From: usc!howland.reston.ans.net!darwin.sura.net!knuth.mtsu.edu!raider!theporch!  
jackatak!jackhill@network.UCSD.EDU  
Subject: 2 Meters and Airlines  
To: info-hams@ucsd.edu

ST1860@SIUCVMB.SIU.EDU (Gary R. Smith KE9MI) writes:

>        I am getting ready to take a rather long trip by air and I was wondering  
> f anybody knew what the regulations were for operating a 2 meter rig aboard a

> commercial airplane.

>

> I have heard 2 conflicting reports...First, I have heard it down right  
> legal to do so. The other was it's okay if the pilot says it alright...Does  
> ybody know the right awnser?? I would appreciate it....

Well, the law/rules say that the pilot or captain of an aircraft or vessel is the ultimate authority on whether or not you may operate ANY device that emits RF energy during flight.

However, the practical answer is that NO pilot will grant you such permission, since each of the domestic air carriers has a written policy which forbids operations "of certain electronic devices" at all times within an aircraft.

Flight attendents will look at, and ask you to place a radio back in your luggage, American has just announced that they will prohibit operation of laptop computers during all flight operations below 10,000 feet...because PCs leak RF like a sieve leaks water!

You can carry your HT, but please don't try to use it. Everyone, you, the pilot, the Flight Attendants will have to deal with an unnecessary problem, and because after the usual suite of DC-to-Daylight mods have been perfomed on the rig, even you can't probably account for the spectral purity of the transmitter. Besides, you could key up 50 or 60 repeaters on each pair and not hear diddley! ;^)

73

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+-----+
| Jack GF Hill          |Voice: (615) 459-2636 - Bicycling and SCUBA Diving |
| P. O. Box 1685        |Modem: (615) 377-5980 -          Compu$erve 76427,31 |
| Brentwood, TN 37024|jackhill@jackatak.raider.net -      Ham Call: W4PPT |
+-----+
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-----  
Date: Fri, 21 May 1993 22:06:26 GMT  
From: mcsun!fuug!kirk!kirk.sun.kirk.fi!squirppi@uunet.uu.net  
Subject: Alinco DJ580 Gets HOT!!!  
To: info-hams@ucsd.edu

Joe B. Simpson (jbs@ee.egr.duke.edu) wrote:

: But seriously, they all do that. It is a little annoying. The speaker/mike  
: comes in handy for defeating the AQL circuit.

Funny, maybe mine was an erratic product, which left the production line

accidentally.. I mean that I was able to drive it on 13.8V (5W TX PWR) for the time when my friend said that his IC (what-was-the-dualbander-again) got too hot to handle. Mine (DJ-580E) didn't at all. I used the dummy load (the antenna, if you prefer) which came within the package.

I don't know if this is linked to the fact that my rig blew its transmitting device (what is that word in English?) so badly that it received a free world tour in a warranty bag.. My father's DJ-580E gets hot.

--

Connect 3141592653590/V93Ter/LapLAND/Mnp666/Vryfast

squirppi@krk.fi  
OH2KEA (KP 20 KF)

-----  
Date: Sat, 22 May 1993 22:58:57 GMT  
From: ddsww1!news.kei.com!news.oc.com!csci-wiermac.etsu.edu!user@uunet.uu.net  
Subject: Anyone built the CHU receiver?  
To: info-hams@ucsd.edu

In article <9305211305.AA03733@NADC.NADC.NAVY.MIL>, skitch@nadc.navy.mil  
(M. Squicciarini) wrote:

>  
>  
> In a recent post  
>  
> >I recently pulled in a schematic from berkeley.edu for  
> >a CHU (7.333) time receiver, which gives machine  
> >readable time signals (via a modem chip). I wonder if  
> >anyone here has built it, and if there might be a PC  
> >board available somewhere?  
> >  
> >TNKS! de - WB5KXH  
>  
> What was the name of the file??  
>  
> 73 -- marty -- nr3z skitch@nadc.navy.mil

First of all - OOPS - wrong site (isn't everywhere in California the same anyways :-). It's at UCSD.EDU in the /hamradio directory.

I had several people respond to the original inquiry, but didn't find anyone who had built it. One person suggested maybe FAR circuits might be interested in making a circuit board. I'm going to drop a note to the author and see if there is any further info...

Incidentally this circuit is somewhat modular - if you have a radio already (I assume most people here do) then you could just build the modem part and use the software to decode the signals...

THANKS de WB5KXH

===== insert usual disclaimers here =====

Bob Wier, East Texas State U., Commerce, Texas  
wier@merlin.etsu.edu (watch for address change)

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Date: Sat, 22 May 1993 14:42:51 GMT  
From: swrinde!gatech!kd4nc!ke4zv!gary@network.UCSD.EDU  
Subject: Balanced feedline (was: G5RV)  
To: info-hams@ucsd.edu

In article <1993May21.170904.29121@news.mentorg.com> mbutts@mbutts.mentorg.com (Mike Butts) writes:

>

>I was about to suspend a full-size G5RV between a pair of very tall trees  
>at our new place. Now I'm not so sure. I want an all-band antenna for  
>both hamming and SWL. I'm only putting up one HF antenna. I already  
>have a tuner (AEA Econotuner) which has a transformer for balanced feed.  
>So I'm thinking a "Zepp" fed by "open" twinlead (the stuff that's about  
>an inch wide, 450 ohms I dimly recall, that they have at Portland Radio  
>Supply) might be just the ticket. But I have questions.

The balanced line fed flattop, it's not really a Zepp, is a very good wideband antenna if:

>First, the lack of shielding. Will this subject me to more noise picked up  
>from the house and shack, such as computers and power lines?

If you can maintain good balance on the line, it should not be an issue.

>Second, I'm planning to use the 'dryer vent stuffed with foam' method shown in  
>the ARRL Handbook to get the feedline, plus several 9913 coaxes for VHF, into  
>the house. How much clearance is needed to avoid messing up the balanced  
>feedline?

Here's one of the problems, getting balanced line in the house without messing up the balance. Ideally, you want to keep the line at least 1/4 wavelength away from an unbalanced conductor. That's rarely practical. The rule of thumb for TV twinlead is to keep it 6 inches from other conductors, and orient it so that both conductors of the twinlead are equally distant from the extraneous conductor, IE flat on. If you must run the line next to a conductor for a long distance, it can help to

put a half twist in the line every few feet to cancel mutual coupling. This will upset balance somewhat, but is the lesser of evils. Probably the most practical way to get balanced line into the house is via a drilled windowpane. A round dryer vent, with the balanced line centered, is not bad, the imbalance introduced is minimized by the symmetry of the duct. The duct should be minimum possible length for best results. Running other wires in the same duct should be strictly avoided as this will certainly introduce imbalance and mutual coupling.

>Third, is there any allband wire antenna with shielded coax feedline that  
>stands up to proper analysis? I think the big appeal of the G5RV is the  
>belief that it's an efficient allband wire antenna with coax feed.

Yes, there are several. The familiar trap dipole is one. I prefer the stub decoupled designs over the more common trap units, however, since they are usually less likely to fail in service. Lattin Radio Labs makes a nice one, the LRL-66. Or, if you use high quality coax and a good choke balun design, you can just feed your random flattop with it. Don't put a VSWR meter in line, just adjust the tuner and smile when people tell you it won't work.

In any case, give a lot of thought to lightning protection. In the old days, a \*big\* DPDT knife switch \*outside\* was the preferred method. Just put the leadin to the swinger and the rig to one side and a good earth ground to the other. If you \*always\* remember to throw the switch when the antenna is not in use, this can offer considerable protection. There are better ways today, but that's the subject for another time.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: 22 May 1993 18:48:39 -0500

From: usc!cs.utexas.edu!geraldo.cc.utexas.edu!emx.cc.utexas.edu!not-for-mail@network.UCSD.EDU

Subject: CW skeds

To: info-hams@ucsd.edu

All this whining and moaning about cw is getting to me, and it is probably getting to some people who are trying to improve their cw speed and becoming discouraged by all the garbage posted here.

If there is anyone out there who genuinely wants to improve or at

least practise their cw, is starting to feel guilty about it, but would like some on-the-air practise, drop me a line and we will set up a sked and do it.

Enough blathering! If you don't like the idea of learning cw, get another hobby or a no-code license. If you want to get your cw up to speed, regardless of whether you think you will ever use it after you upgrade, send me a note and suggest a time and band for some cw away from all these doomsayers and disgruntled cw-haters.

I would also suggest listening to the W1AW code practise sessions, they are a big help to many people. Try it, you'll like it!

Derek Wills (AA5BT, G3NMX)  
Department of Astronomy, University of Texas,  
Austin TX 78712. (512-471-1392)  
oo7@astro.as.utexas.edu

-----  
Date: 22 May 93 17:25:37 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Daily Solar Geophysical Data Broadcast for 21 May  
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 141, 05/21/93  
10.7 FLUX=091.0 90-AVG=123 SSN=034 BKI=0001 1211 BAI=002  
BGND-XRAY=A7.7 FLU1=8.6E+05 FLU10=1.3E+04 PKI=1011 1211 PAI=004  
BOU-DEV=011,003,003,009,006,013,005,006 DEV-AVG=007 NT SWF=00:000  
XRAY-MAX= B1.2 @ 0710UT XRAY-MIN= A7.4 @ 2108UT XRAY-AVG= A8.5  
NEUTN-MAX= +009% @ 1235UT NEUTN-MIN= +009% @ 1235UT NEUTN-AVG= +9.0%  
PCA-MAX= -0.2DB @ 1235UT PCA-MIN= -0.2DB @ 1235UT PCA-AVG= -0.2DB  
BOUTF-MAX=55397NT @ 1344UT BOUTF-MIN=55359NT @ 1801UT BOUTF-AVG=55384NT  
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+000,+000,+000  
GOES6-MAX=P:+124NT@ 1726UT GOES6-MIN=N:-074NT@ 0059UT G6-AVG=+102,-014,-046  
FLUXFCST=STD:095,095,095;SESC:090,090,090 BAI/PAI-FCST=005,005,010/010,010,010  
KFCST=2213 3112 2213 3112 27DAY-AP=008,013 27DAY-KP=3222 3322 3344 2232  
WARNINGS=  
ALERTS=  
!!END-DATA!!

NOTE: The Effective Sunspot Number for 20 MAY 93 was 56.0.  
The Full Kp Indices for 20 MAY 93 are not available.

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Date: Sat, 22 May 1993 18:14:48 GMT

From: saimiri.primate.wisc.edu!sal.wisc.edu!zimmer!news@ames.arpa  
Subject: G5RV Antenna (My opinion)  
To: info-hams@ucsd.edu

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Date: Sat, 22 May 1993 15:35:52 GMT  
From: usc!howland.reston.ans.net!darwin.sura.net!knuth.mtsu.edu!raider!theporch!  
jackatak!jackhill@network.UCSD.EDU  
Subject: Going about building your first transceiver??  
To: info-hams@ucsd.edu

I can not help myself....Net Police, please forgive me! ;^)

oswood@hilbert.chem.yale.edu (Mark Oswood) writes:  
> In article <1t8qn6INN8n8@mojo.eng.umd.edu>, chuck@eng.umd.edu (Chuck Harris -  
> :>In article <1993May12.063027.15378@ke4zv.uucp> gary@ke4zv.UUCP (Gary Coffma  
> :> Not sure what you mean here. I'd gladly jump out of a swimming pool and  
> :>grab my 12V, 800A car battery, one terminal in each hand...  
> > If you want to do the real demonstration, you will have to badly cut your  
> > elbow on the body of your car, and simultaneously drive your palm into a  
> > sharp 12v battery terminal (the starter solenoid will do). Your heart  
> > will stop.  
> Now, I'm still just a medical student, so you may not consider this an expert  
> medical opinion, but I would not recommend either of the above activities as  
> being conducive to good health and long life.

What a picture: I can just see John Q. Ham, over 50, overweight, huge spread butt from sitting in an easy chair by the operating position... in the opening rounds of this competition, Ham leaps into the pool, swims across (how about he falls in and his bouyancy prevents him from sinking so the tsunami from his entry can wash him to the opposite "shore") and then struggles out and grasps the terminals of a 12v 800A battery; surely his form netted only a low score, but determined to show the newbies and wimpy no-coders what a REAL HAM he is, John Q. Ham waddles to the next table where, in spite of the obvious pain to come from this next event, he does manage to slash his elbow on the ragged metal work of his Detroit Iron (gotta be a PrimaCoat '73 Firebird if this is to be a true "manly" act! ;^), then, gritting his teeth in anticipation of the pain to come, Ham rams his hand into the sharpened edge of his battery terminal. What's this? Nothing happens? Oh, silly Ham...can't tell positive from negative and rammed his hand into the ground/negative side. His heart stopped nonetheless, from exhaustion, occlusion, cancer, and the stress of the moment.

Think we could make this competition an annual affair...say in the fleamarket at Dayton, Saturday Afternoon, 4:30PM...by my selling

space? ;^)

Now, for a reality check. As Gary pointed out, there is probably little to no danger (save in the minds of the beholders) off grabbing the terminals of a 12v battery system, even while wet. Swimming Pool water isn't super conducting and 12v won't drive that much current THROUGH the body...mostly over the wet skin.

As for Chuck's scenerio, you gotta like a guy who scripts in a little gratuitous violence, some blood and pain, and as much unpleasantness as one could muster BEFORE the electrocution... (want a job as a warden? ;^) If I had to perform this "exercise", perhaps the resulting electrocution would be a relief! ;^)

And, for the medical school lad from Yale: Mark, just a guess, but you probably haven't done much serious 4-wheeling, have you? I have, and more than once I have had to dive down to get the hook from the winch, and start it in reverse so I could then get the winch to drag me out of the stream and up on shore...12v winch motors work FINE under water, so not much current must be flowing, except in the wires...

> It seems that the safest  
> rule is to work on a circuit with no power applied and after shorting any  
> large capacitors. If you must apply power, then don't wear metal jewelry, use  
> insulated tools, and keep one hand firmly tied behind your back.  
And this last, ladies and germs, is the best advice yet for handling radio equipment, especially if fire bottles are inside! ;^)

Thanks for the relief from all the noise about G5RV and SBS.COM

73

Jack

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+-----+
| Jack GF Hill      |Voice: (615) 459-2636 - Bicycling and SCUBA Diving |
| P. O. Box 1685    |Modem: (615) 377-5980 - Compu$erve 76427,31 |
| Brentwood, TN 37024|jackhill@jackatak.raider.net - Ham Call: W4PPT |
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Date: Sat, 22 May 1993 20:42:26 GMT

From: swrinde!gatech!howland.reston.ans.net!ux1.cso.uiuc.edu!news.cso.uiuc.edu!  
uxa.cso.uiuc.edu!aaa33750@network.UCSD.EDU

Subject: Need Geosync Newsline Radio Program Info

To: info-hams@ucsd.edu

I had the information about the radio program which included Newsline as a part of it's format but I've lost it. I need the time, satellite and frequency.



If it was in an Amsat or Spacenews bulletin, pse let me know which issue.

Thanks!

Drew Arnett kb9fko@uiuc.edu

-----  
Date: Sat, 22 May 1993 17:09:17 GMT  
From: swrinde!zaphod.mps.ohio-state.edu!howland.reston.ans.net!torn!csd.unb.ca!  
unbham@network.UCSD.EDU  
Subject: Netherlands  
To: info-hams@ucsd.edu

I am looking for any amateurs who are in Maastricht in the Netherlands.

Please email me if you do

Thanks

Derek Billingsley

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Date: Sat, 22 May 1993 20:22:51 GMT  
From: netcomsv!netcom.com!jfh@decwrl.dec.com  
Subject: Question: Can a novice take the extra test?  
To: info-hams@ucsd.edu

Scott.Binder@launchpad.unc.edu (Scott William Binder) wrote:

>In article <1tjbru\$1rm@charm.magnus.acs.ohio-state.edu> ksampath@magnus.acs.ohio-  
state.edu (Krishna S Sampath) writes:

>>the subject says it. assuming that the novice has 20 wpm cw, can the ham  
>>take the extra test?

>The Novice must take all the written tests progressively (3A, 3B, 4A, 4B)  
>in that order.

Several people have made that comment, but 97.501 says only that certain  
tests must be passed in order to get a particular grade of license. It  
doesn't say that they have to be taken in order.

So why couldn't he take the tests in the order 4B 4A 3B 3A if he so  
desired, or take only the 4B? He wouldn't get an Extra license, of course,  
but that's not what he asked - he asked about taking the test, not about  
getting a license.

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Jack Hamilton KD6TTL jfh@netcom.com PO Box 281107 SF, CA 94128 USA

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Date: Thu, 20 May 1993 00:12:19 GMT  
From: mcsun!fuug!krk!krksun.krak.fi!oh2lak@uunet.uu.net  
Subject: Recommendations wanted for SAT QSO's  
To: info-hams@ucsd.edu

You have two rigs to choose. Now you think why only two, when there are three big trademarks. You may choose either Yaesu or Icom. BUT FORGET KENWOOD. They advertise their multi-band-mode rig as great satellite radio, but it is a fake. It can't even reverse track in satellite mode!! (Almost all satellite xponders are inverting...)

In Yaesu, you will have an advanced CAT-connection to computer with software available, The FT-736 is also quite good radio, RX is good and TX has good spectre. FT-736 is at the moment only quad-band-radio available (6m, 220MHz, 2m, 70cm and 23cm. Choose four and install!)

In Icom you will have dual-band simultaneous RX, but that is not necessary for satellite operations. The IC-970A belongs to a Icom IC-X75 family, the basic set with 2m/70cm is exact same as IC-275 and IC-475 glued together. There is no 6m or 220MHz module available for IC-970. 23cm module is available, so is 50-905MHz all mode RX module.

Both radios are good, they have the same options and operations, choose the best!

/Erik

--  
E R I K F I N S K A S OH2LAK

-----  
InterNet: Erik.Finskas@krk.fi  
OH2LAK@krk.fi  
Lakki@cute.cute.fi  
Amateur Packet: OH2LAK@OH2RBI.FIN.EU

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H A M R A D I O  
T H E R E A L T H I N G  
-----

R A  
RADIO AMATEUR  
D HAM A  
I T RADIO  
O E I  
U O  
R

Date: 22 May 93 17:23:43  
From: usc!howland.reston.ans.net!noc.near.net!news.bbn.com!news.bbn.com!  
wbe@network.UCSD.EDU

Subject: RFI from ZyXEL modem  
To: info-hams@ucsd.edu

tpang@fraser.sfu.ca (Tsui Ting Debbie Pang) writes:

> ZyXEL U-1496E is a high-speed external modem, which uses a 68000 uP and  
> 2 DSP chips at 13MHz and 40MHz respectively, inside a plastic case with  
> no metal/iron RFI shielding. How does it pass FCC as class B?

dogbowl@dogbox.acme.gen.nz (Kennelmeister) replies:

It doesn't. If you look at the label and the manual, you'll find  
that it's FCC class A.

It's hard to tell if you're right or not, really. The printed manual I have  
says the U-1496(S) and B models are Class A devices, but for the U-1496E says  
"This equipment has been tested and found to comply with the limits for a  
CLASS B digital device pursuant to Part 15 of the FCC Rules." On the other  
hand, the sticker on my 'E' modem doesn't say what FCC class it meets, which  
normally would mean it's class A.

Buy a can of nickel shielding spray. The stuff I used was branded  
"Electrolube" and is made in the UK. ...

Thanks for the suggestion. I hadn't heard of that solution.

NOTE: You have probably just voided the modem's warrenty by spraying  
the case. You'll definitely void it if you go near the PCB  
with a soldering iron

I agree that soldering to the circuit board is likely to void the warranty,  
but I don't see why spraying the case would do so as long as one is careful  
to leave all the ventilation holes open. I'll check with my dealer.

-WBE

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Date: 22 May 93 13:19:39 GMT  
From: psinntp!gdc!kurdzo@uunet.uu.net  
Subject: Velocity Factor of Hardline Coax  
To: info-hams@ucsd.edu

I have some 1-5/8" hardline coax that I want to experiment with but I  
do not know its velocity factor. There are two types:

84147 ANDREW LDF7-50A HELIAX (foam dielectric)

84147 ANDREW RG319A/U HJ7-50 HELIAX (helical nylon spacer dielectric)

Any help would be appreciated.

--

Jim Kurdzo    N1KKA  
General DataComm  
Middlebury, CT  06762-1299  
(203) 574-1118 x6443  
kurdzo@gdc.com

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Date: Sat, 22 May 1993 21:29:00 GMT  
From: sdd.hp.com!cs.utexas.edu!swrinde!emory!sol.ctr.columbia.edu!news.kei.com!ub!  
acsu.buffalo.edu!ubvmsb.cc.buffalo.edu!v111qheg@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <1tjbru\$1rm@charm.magnus.acs.ohio-state.edu>,  
<1993May22.083124.7779@samba.oit.unc.edu>, <jfhC7G3A4.3HK@netcom.com>msb.c  
Subject : Re: Question: Can a novice take the extra test?

In article <jfhC7G3A4.3HK@netcom.com>, jfh@netcom.com (Jack F. Hamilton) writes...  
>Scott.Binder@launchpad.unc.edu (Scott William Binder) wrote:  
>>In article <1tjbru\$1rm@charm.magnus.acs.ohio-state.edu>  
ksampath@magnus.acs.ohio-state.edu (Krishna S Sampath) writes:  
>>>the subject says it. assuming that the novice has 20 wpm cw, can the ham  
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>  
>>The Novice must take all the written tests progressively (3A, 3B, 4A, 4B)  
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>Several people have made that comment, but 97.501 says only that certain  
>tests must be passed in order to get a particular grade of license. It  
>doesn't say that they have to be taken in order.  
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>So why couldn't he take the tests in the order 4B 4A 3B 3A if he so  
>desired, or take only the 4B? He wouldn't get an Extra license, of course,  
>but that's not what he asked - he asked about taking the test, not about  
>getting a license.  
>

The W5YI, ARRL, WB6NOA, and most other VEC's have made it mandatory that tests  
be progressively given in order of license class. The student may ask to take  
them as you describe, but the VEC's are not allowed to administer them in  
any order other than 2,3a,3b,4a,4b. The exception is the code tests. You may  
take the 20WPM first. The logic behind it to ensure that prospective hams  
take the entire battery of exams to get to extra class.

Peter Vasilion, KB2NMV

--W2RR WNYDXA--

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End of Info-Hams Digest V93 #627

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